

AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior versions of claims in the application.

1. (Currently Amended) A traffic sign apparatus, comprising:

a sign body with a sign surface which emits light by ultraviolet irradiation; and
an irradiation device which irradiates ultraviolet rays onto said sign surface,

wherein, assuming that a maximum incident angle and a minimum incident angle of ultraviolet rays ~~be θ_1 , the ultraviolet rays~~ being irradiated from an irradiation source of said irradiation device onto an objective sign surface on the sign surface that is an irradiation objective of the irradiation source are θ_1 and θ_2 , respectively, ~~and that minimum incident angle be θ_2~~ , the angle θ_1 is ~~set to~~ more than 30° and less than 70° , and the angle θ_2 is ~~set to~~ more than 5° and less than 30° .

2. (Currently Amended) The traffic sign apparatus according to claim 1, wherein, assuming that a distance between said irradiation source and the sign surface along a reference axial direction of the sign surface ~~[[be]]~~ is X, and that a sum of a distance between the irradiation source and a side end of the sign surface closer to the irradiation device along a surface direction of the sign surface and a width of the sign surface ~~[[be]]~~ is M, said irradiation source is disposed so that X/M is more than 0.5 and less than 2.0 with respect to the sign surface.

3. (Original) The traffic sign apparatus according to claim 1 or 2, wherein said irradiation device includes a plurality of irradiation units, each of the irradiation units having said irradiation source and an irradiating surface section with a reflection surface for reflecting the ultraviolet rays irradiated from the irradiation source, and wherein

irradiation angles of the ultraviolet rays of said plurality of irradiation units are different from each other.

4. (Previously Presented) The traffic sign apparatus according to claim 1 or 2, wherein said irradiation source has a light emitting tube of quartz glass.

5. (Currently Amended) The traffic sign apparatus according to claim 1 or 2, wherein said sign body further comprises ~~wherein surface of said sign surface is processed with a transparent dirt-proof layer on said sign surface processing.~~

6. (New) A traffic sign apparatus, comprising:

a sign body with a sign surface which emits light by ultraviolet irradiation; and

an irradiation device which irradiates ultraviolet rays onto said sign surface, said irradiation device being disposed to a side of said sign body,

wherein an incident angle of said ultraviolet rays at a top corner of an objective sign surface of said sign body farthest from said irradiation device is more than 30° and less than 70°,

wherein an incident angle of said ultraviolet rays at a bottom corner of said objective sign surface of said sign body nearest to said irradiation device is more than 5° and less than 30° .

7. (New) The traffic sign apparatus according to claim 6, wherein, assuming that a distance between said irradiation source and the sign surface along a reference axial direction of the sign surface is X, and that a sum of a distance between the irradiation source and a side end of the sign surface closer to the irradiation device along a surface direction of the sign surface and a width of the sign surface is M, said irradiation source is disposed so that X/M is more than 0.5 and less than 2.0 with respect to the sign surface.

8. (New) The traffic sign apparatus according to claim 6 or 7,

wherein said irradiation device includes a plurality of irradiation units, each of the irradiation units having said irradiation source and an irradiating surface section with a reflection surface for reflecting the ultraviolet rays irradiated from the irradiation source, and

wherein irradiation angles of the ultraviolet rays of said plurality of irradiation units are different from each other.

9. (New) The traffic sign apparatus according to claim 6 or 7, wherein said irradiation source has a light emitting tube of quartz glass.

10. (New) The traffic sign apparatus according to claim 6 or 7, wherein said sign body further comprises a transparent dirt-proof layer on said sign surface.

11. (New) A traffic sign apparatus, comprising:

a sign body with a sign surface which emits light by ultraviolet irradiation; and
an irradiation device which irradiates ultraviolet rays onto said sign surface, said irradiation device including a first irradiation unit and a second irradiation unit,

wherein, assuming that a maximum incident angle of the ultraviolet rays being irradiated from the first irradiation unit onto an objective sign surface on the sign surface that is an irradiation objective of the first irradiation unit is θ_1 , and that a minimum incident angle of the ultraviolet rays being irradiated from the second irradiation unit onto the objective sign surface on the sign surface that is an irradiation objective of the second irradiation unit is θ_2 , the angle θ_1 is more than 30° and less than 70° , and the angle θ_2 is more than 5° and less than 30° .

12. (New) The traffic sign apparatus according to claim 11, wherein, assuming that a distance between said irradiation device and the sign surface along a reference axial direction of the sign surface is X, and that a sum of a distance between the irradiation device and a side end of the sign surface closer to the irradiation device along a surface direction of the sign surface and a width of the sign surface is M, said irradiation device is disposed so that X/M is more than 0.5 and less than 2.0 with respect to the sign surface.

13. (New) The traffic sign apparatus according to claim 11 or 12,

wherein said first and second irradiation units each include an irradiation source and an irradiating surface section with a reflection surface for reflecting the ultraviolet rays irradiated from the irradiation source, and

wherein irradiation angles of the ultraviolet rays of said first and second irradiation units are different from each other.

14. (New) The traffic sign apparatus according to claim 11 or 12, wherein said irradiation device has a light emitting tube of quartz glass.

15. (New) The traffic sign apparatus according to claim 11 or 12, wherein said sign body further comprises a transparent dirt-proof layer on said sign surface.